This is an official

DHEC Health Update

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South Carolina Shigella Surveillance & Identified Antimicrobial Resistance

Background

This DHEC Health Update is a supplement to the DHEC Health Advisory of May 8, 2008, on "Shigella outbreaks in Richland and Lexington Counties" (available at: www.scdhec.gov/health/disease/han/docs/DHA-Shi-1.pdf) and provides treatment guidance for antibiotic-resistant Shigella that have been identified associated with these outbreaks.

In 2008, South Carolina has experienced an increase in *Shigella* reports when compared to the last 3 years of reported data. This trend is consistent with several other states and also overall national data as reported in the most recent CDC <u>Morbidity and Mortality Weekly Report</u>, "Table II: Provisional Cases of Selected Notifiable Diseases" (available at: www.cdc.gov/mmwr/PDF/wk/mm5719.pdf). In South Carolina, a majority of cases that are investigated have not identified epidemiologic links among cases. However, in the past three weeks, *Shigella sonnei* outbreaks have been confirmed in three schools and in two daycares in Richland and Lexington counties.

Shigellosis outbreaks can occur at any time of the year but are most common in the summertime. Culture-confirmed cases should be promptly reported to local health departments so that outbreaks of shigellosis can be recognized and appropriate control measures instituted.

Identified Antimicrobial Resistance

Antibiotic resistance is common in many isolates of *Shigella* sp., often to either ampicillin or trimethoprim-sulfamethoxazole. Since April 2008, several *Shigella* isolates from persons residing in Richland and Lexington counties showed resistance to both ampicillin and/or trimethoprim-sulfamethoxazole. All of these isolates were susceptible to ciprofloxacin, an antibiotic not approved by the FDA for use in children less than 18 years of age. While most clinical infections with *Shigella* are self-limited (48-72 hours) and do not require antimicrobial therapy, treatment is recommended for patients with severe disease, dysentery, or underlying immunosuppressive conditions.

The following antimicrobial treatment guidelines are from the 2006 Redbook:

- Antimicrobial susceptibility testing of clinical isolates is indicated for all cases of Shigella infection, because
 resistance to antimicrobial agents is common and susceptibility data can guide appropriate therapy.
- For cases in which antimicrobial susceptibility is unknown, empiric treatment with azithromycin or parenteral ceftriaxone may be given. For persons 18 years or older, ciprofloxacin may be used. Once antimicrobial susceptibility results are known, treatment should be changed to an antimicrobial agent to which the isolate is susceptible.
- If susceptibility test results indicate Shigella resistance to ampicillin or trimethoprim-sulfamethoxazole, oral
 azithromycin or parenteral ceftriaxone may be given. For persons 18 years or older, ciprofloxacin may be
 used.

References and Additional Information

Red Book 27th Edition: 2006 Report of the Committee on Infectious Diseases. Am Acad Ped pp. 589-90.

DHEC Contact Information for Reportable Diseases and Reporting Requirements

Reporting of Shigellosis cases is included in the current DHEC List of Reportable Conditions as a "report within 7 days" condition. However, outbreaks or clusters of cases are considered "Immediately Reportable by Phone" conditions. Healthcare providers are required to report suspected or confirmed cases to their Regional Public Health Offices, at the contact numbers listed below.

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

Regional Public Health Offices - 2008

Mail or call reports to the Epidemiology Office in each Public Health Region.

Region I

Anderson, Oconee

220 McGee Road Anderson, SC 29625 Phone: (864) 260-4358 Fax: (864) 260-5623

Nights / Weekends: 1-866-298-4442

Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda

1736 S. Main Street Greenwood, SC 29646 Phone: 1-888-218-5475 Fax: (864) 942-3690

Nights / Weekends: 1-800-420-1915

Region 2

Greenville. Pickens

PO Box 2507 200 University Ridge Greenville, SC 29602-2507 Phone: (864) 282-4139 Fax: (864) 282-4373

Nights / Weekends: 1-800-993-1186

Cherokee, Spartanburg, Union

PO Box 4217 151 E. Wood Street Spartanburg, SC 29305-4217 Phone: (864) 596-2227, x- 210 Fax: (864) 596-3443

Nights / Weekends: 1-800-993-1186

Region 3

Chester, Lancaster, York

PO Box 817 1833 Pageland Highway Lancaster, SC 29721 Phone: (803) 286-9948 Fax: (803) 286-5418

Nights / Weekends: 1-866-867-3886

Region 3 (continued)

Fairfield, Lexington, Newberry, Richland

2000 Hampton Street Columbia, SC 29204 Phone: (803) 576-2749 Fax: (803) 576-2993

Nights / Weekends: 1-888-554-9915

Region 4

Clarendon, Kershaw, Lee, Sumter

PO Box 1628 105 North Magnolia Street Sumter, SC 29150 Phone: (803) 773-5511 Fax: (803) 775-9941

Nights/Weekends: 1-877-831-4647

Chesterfield, Darlington, Dillon, Florence, Marlboro, Marion

145 E. Cheves Street Florence, SC 29506 Phone: (843) 661-4830 Fax: (843) 661-4859 Nights / Weekends: (843) 660-8145

Region 5

Bamberg, Calhoun, Orangeburg

PO Box 1126 1550 Carolina Avenue Orangeburg, SC 29116 Phone: (803) 533-7199 Fax: (803) 533-7134 Nights / Weekends: (803) 954-8513

Aiken, Allendale, Barnwell

1680 Richland Avenue, W. Suite 40

Aiken, SC 29801 Phone: (803) 642-1618 Fax: (803) 643-8386

Nights / Weekends: (803) 827-8668 or

1-800-614-1519

Region 6

Georgetown, Horry, Williamsburg

1931 Industrial Park Road Conway, SC 29526-5482 Phone: (843) 915-8804 Fax: (843) 365-0085

Nights / Weekends: (843) 381-6710

Region 7

Berkeley, Charleston, Dorchester

4050 Bridge View Drive, Suite 600 N. Charleston, SC 29405 Phone: (843) 746-3860 Fax: (843) 746-3851

Nights / Weekends: (843) 219-8470

Region 8

Beaufort, Colleton, Hampton, Jasper

219 S. Lemacks Street Walterboro, SC 29488 Phone: (843) 549-1516, x-214 Fax: (843) 549-6845

Nights / Weekends: 1-800-614-4698

<u>DHEC Bureau of Disease Control</u> Division of Acute Disease Epidemiology

1751 Calhoun Street Box 101106 Columbia, SC 29211 Phone: (803) 898-0861 Fax: (803) 898-0897

Nights / Weekends: 1-888-847-0902



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Categories of Health Alert messages:

Health Alert conveys the highest level of importance; warrants immediate action or attention.

Health Advisory provides important information for a specific incident or situation; may not require immediate action. **Health Update** provides updated information regarding an incident or situation; unlikely to require immediate action.